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10/517,735	08/08/2005	Ian Richard Webb	3700.P0388US	5929

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EXAMINER

RIPLEY, JAY R

ART UNIT	PAPER NUMBER
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3679

MAIL DATE	DELIVERY MODE
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11/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,735

Applicant(s)

WEBB ET AL.

Examiner

Jay R. Ripley

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☒ Other: Attachment A.

DETAILED ACTION

Claims 10-30 are pending. No claims have been withdrawn. Claims 1-9 have been cancelled.

Drawings

The drawings were received on 09/10/2007. These drawings are not acceptable.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the structural feature that “so that the longitudinal edge of said web portion and said reinforcing member flange at the longitudinal edge bear against a region on an outer surface of said tube of said casing” (emphasis added) as recited in lines 29-32 of claim 25 must be shown or the feature(s) canceled from the claim(s). The Examiner notes that original Figure 3 does not show the any of the flange in contact with the tubular part; the Examiner takes the claim language to indicate that the longitudinal edge of the web and respective reinforcing flange is not shared, but solely belongs to the web. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 10 is objected to because they are not compliant with 37 CFR § 1.75(i), i.e. "Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation."

Claim 10 is objected to as the recitation of "the tubular portion" in line 31 should be --a tubular portion-- to provide proper antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11, 12-15, 19, 20, and 22-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claims 11, 19, 25, and 30, there is a lack of clarity due to the use of the term “transverse”. The term “transverse” is found in: claim 11, line 4, as “transversely”; claim 19, line 3, as “transverse”; claim 25, line 22, as “transverse”; claim 30, line 19, as “transverse”. The issue of clarity arises as the term “transverse” generally means “situated or lying across” and when used in conjunction with round aspect, annular objects, i.e. tubulars, the term “transverse” is generally used to indicate across the tubular object in a plane that is perpendicular to the central axis of the tubular. However, as a non-exhaustive example, in claim 11, it is recited “with reinforcing member flanges extending transversely along both longitudinal edges of the web portion” in lines 3-5; the noted recitation appears to indicate that the term transversely is being used to indicate longitudinally to the central axis of the tubular casing, across the longitudinal length of the web (as observed in the instant Application’s original figures). Yet in claim 25, it is recited in lines 21-22, “including a web portion with transverse through holes”, appearing to indicate that the term “transverse” is being used to simply indicate holes between, i.e. through, a web’s surfaces in a direction that not longitudinal to the central axis of the tubular casing. To clarify the claims, the Applicants should use the term “transverse” in a consistent manner throughout the claims or further indicate the reference to which the term “transverse” applies, i.e. stating exactly what is being transversed in what relative direction.

In regard to claim 12, it is recited lines 4-5, “said web portion is in surface-to-surface contact with a planar surface of said radially projecting flange”. As claim 10 recites two web portions (lines 25-27) and two radially projecting flanges (lines 19-20), it is unclear as to which set of noted components make surface to surface contact.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10, 11, 16, 17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Straub (U.S. 5,273,322).

In regard to claim 10, Straub, in Figures 1-5, below, discloses a pipe coupling for connecting together the ends of two pipes, comprising:

a tubular casing (10) having circumferentially extending end flanges (14) projecting inwardly from the axial ends of the casing,

a tubular sealing sleeve (32) inside the casing;

tensioning (52 and 53) means for tightening the casing around the sealing sleeve; and

frustoconical gripping rings (44) located within the casing at opposite ends of the casing, the inner edges of the gripping rings being formed with teeth (68);

the casing comprising a strip of metal formed into a tube with a gap (as observed in Figure 1) extending longitudinally of the casing between the free ends of the strip;

the tensioning means interconnecting the free ends of the strip;

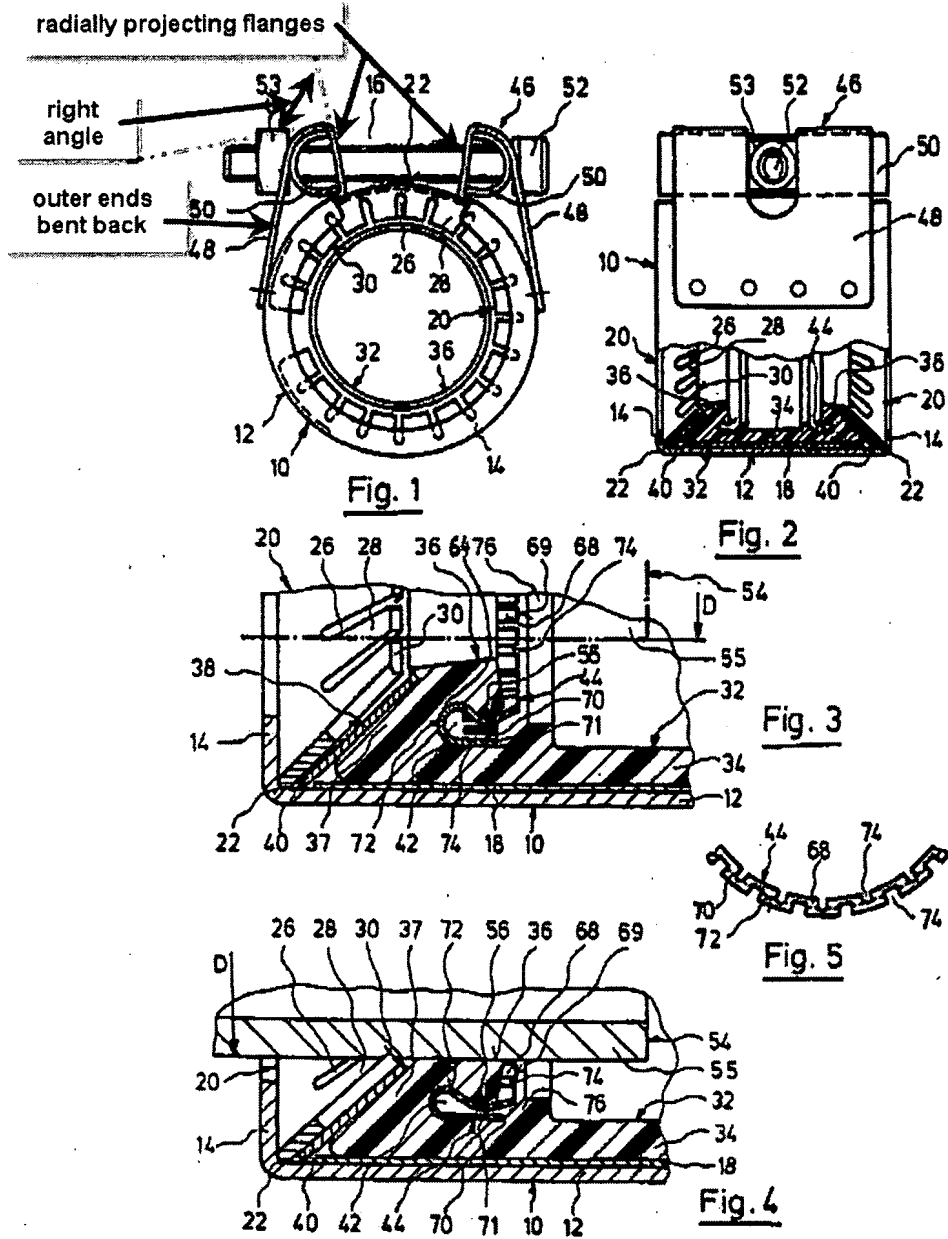
the arrangement being such that when the coupling is placed around the ends of two pipes to be connected and the tensioning means are tightened, the casing presses the sealing sleeve against the pipe ends to form seals and forces the teeth on the gripping ring to bite into the surface of the pipes to grip the pipes,

wherein the free ends of the strip are bent outwardly to form radially projecting flanges extending longitudinally of the casing on opposite sides of the gap, the two radially projecting flanges being placed between two reinforcing members (50) which extend substantially the length of the coupling, the tensioning means passing through sets of aligned holes in the reinforcing members and the radially projecting flanges, the reinforcing members each having an angled cross-section (the reinforcing members are U-shaped - column 3, lines 8-9 - and, therefore, there is an angle formed by the junction of the straight sides and the curved portion as shown in Figure 1 cutout, below) of the , a web portion (shaded in Figure 1 cutout, below) through which the holes for the tensioning means pass, and a reinforcing flange extending along the longitudinal edge of the web portion that is nearer to the axis of the coupling, the reinforcing member flange bearing against the tubular portion of the casing (as observed in Figure 1, see Attachment A, the noted "reinforcing member flange" appears to abut the surfaces of the indicated corner. Simple contact meets a broad definition of "bearing").

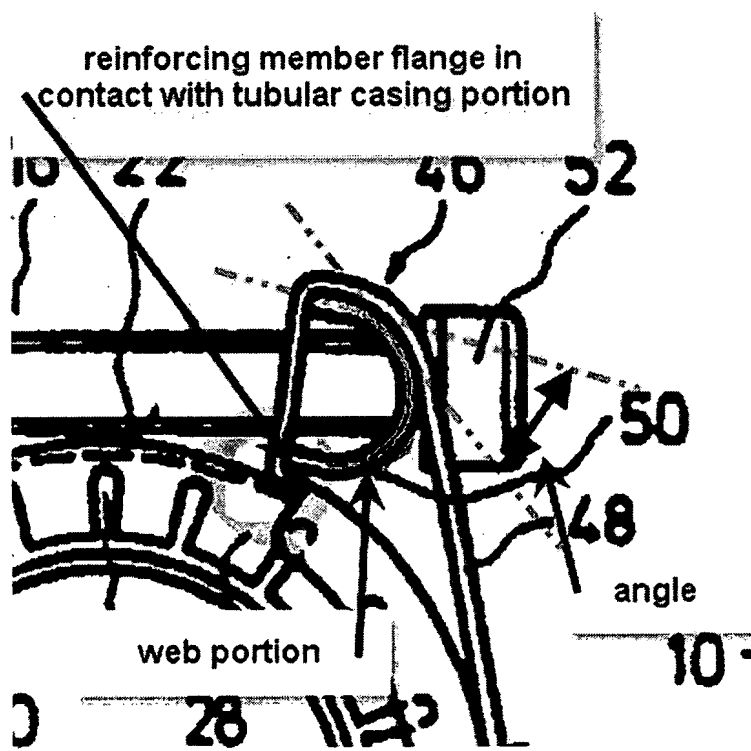
U.S. Patent

Dec. 28, 1993

5,273,322



(Straub Figures 1-5)



(Straub Figure 1 cutout)

In regard to claim 11, as best understood, Straub further discloses that each reinforcing member has a channel-shaped cross section with reinforcing member flanges (the straight sides of the U-shape) extending transversely along both longitudinal edges of the web portion (as observed in Figure 1 cutout, above).

In regard to claim 16, Straub further discloses that the aligned holes are elongated in the radial direction (as observed in Figure 2).

In regard to claim 17, Straub further discloses a backing rings (parts 40 in Figure 3, above) provided inside the casing adjacent a respective gripping ring (44) between the gripping ring and the sealing sleeve (32) to prevent the sealing sleeve from bulging between the teeth of the gripping ring.

In regard to claim 19, Straub further discloses that the outer ends of the radially projecting flanges are bent back in a transverse direction to form planar stiffening flanges (as observed in Figure 1, above) along the longitudinal outer edges of the radially projecting flanges.

In regard to claim 20, Straub further discloses that the radially projecting flanges are bent back at right angles (as observed in Figure 1, above).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 18, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Straub as applied above, and in further view of Schreiter (U.S. 6,206,434).

In regard to claims 13 and 21, Straub discloses the claimed invention except for two sets tensioning means. Schreiter teaches a split sleeve pipe coupling, in Figures 1-3, which uses two sets of tensioning means (10) to distribute the tightening forces from tightening over the reinforcing members (5 and 6). Each tensioning means comprises bolts and nuts. As Schreiter relates to split sleeve pipe couplings, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the pipe coupling as disclosed by Straub with two sets of tensioning means as taught by Schreiter to distribute the tightening forces from tightening over the reinforcing members.

In regard to claim 23, Straub further provides for as the bolts are tightened, the radially projecting flanges are drawn together (column 3, lines 19-35).

In regard to claim 18, Straub discloses the claimed invention except for an inner sleeve inside the sealing sleeve. Schreiter teaches a split sleeve pipe coupling, in Figures 1-3, which uses an inner sleeve (18) to ensure that in the clamped position, that the material of the sealing sleeve will not squeeze between the ends of the pipes (column 3, lines 29-34). As Schreiter relates to split sleeve pipe couplings, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the pipe coupling as disclosed by Straub with an inner sleeve inside the sealing sleeve as taught by Schreiter to ensure that in the clamped position, that the material of the sealing sleeve will not squeeze between the ends of the pipes.

Allowable Subject Matter

Claims 12, 14, 15, and 24-30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

As to claim 12, lines 4-5, the closest prior art of Straub (U.S. 5,273,322) discloses the claimed pipe coupling with the exception that the web portion is in surface to surface contact with a planar surface of the radially projecting flange.

As to claim 25, lines 9-10, the closest prior art of Straub (U.S. 5,273,322) discloses the claimed pipe coupling with the exception that the radially projecting flanges have through holes adjacent the free ends thereof (the radially projecting flanges must have a free end).

As to claim 30, lines 8-9, the closest prior art of Straub (U.S. 5,273,322) discloses the claimed pipe coupling with the exception that the radially projecting flanges have through holes adjacent the free ends thereof (the radially projecting flanges must have a free end).

Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

As to claim 22, lines 2-4, the closest prior art of Straub (U.S. 5,273,322) discloses the claimed pipe coupling with the exception that the nuts are of a size that fits between the flanges of the reinforcing member so as to prevent rotation of the nuts..

There is no teaching or suggestion, absent the applicant's own disclosure, for one having ordinary skill in the art at the time the invention was made to modify the adapter assembly of Straub (U.S. 5,273,322) to have the above mentioned features.

Response to Arguments

Applicant's arguments filed 09/10/2007 have been fully considered but they are not persuasive.

Concerning the Applicants' assertion in page 13, lines 4-6, of the reply filed 09/10/2007 that the prior art of Straub (U.S. 5,273,322) does not disclose a strip with a free end in regard to claim 10, the argument is not persuasive. The phrase "free end", given a broad definition, simply indicates an end that is free to move, not connected to the whole. The phrase "free end" indicates no specific structure and the phrase "free end" does not preclude any constituent structure, such as having loops. As shown in Figure 1, see Attachment A, the tubular casing of Straub does have two free ends, else how could the structure be tightened around two pipe ends? If the "free-end" of the prior art is not as the Applicants intended, then the Applicants should recite in the claims that structure which the Applicants do intend the phrase "free end" to indicate and thereby overcome the prior art of Straub.

Concerning the Applicants' assertion in page 13, lines 7-13 of the reply filed 09/10/2007 that the prior art of Straub (U.S. 5,273,322) does not disclose the reinforcing member flange bearing against the tubular portion of the casing. First, nowhere in the claim is it defined as to what constitutes the tubular portion of the casing; therefore, any arbitrarily portion that is a constituent of the tubular casing may be deemed to meet the "tubular portion" limitation since the whole casing, including any constituent elements and portions, is recited as being "a tubular casing" in claim 10, line 2. Further, as observed in Figure 1, see Attachment A, the noted

“reinforcing member flange” appears to abut the surfaces of the indicated corner. Simple contact meets a broad definition of “bearing”.

Concerning the Applicants' assertion in page 13, lines 7-13 of the reply filed 09/10/2007 that the prior art of Straub (U.S. 5,273,322) does not disclose the outer ends of the radially projecting flanges “bent back to form ‘planar stiffening flanges’”, the argument is not persuasive. As can be clearly observed in Figure 1, see Attachment A, the outer ends of the radially projecting flanges are “bent back to form ‘planar stiffening flanges’”.

Concerning the Applicants assertion in page 14, lines 20-21, of the reply filed 09/10/2007 that the prior art of Straub (U.S. 5,273,322) “does not disclose the radially outwardly projecting flanges having free ends”, the argument is not persuasive. The noted language is not recited in claim 10.

Concerning the Applicants assertion in page 15, lines 13-15, of the reply filed 09/10/2007 that the prior art of Straub (U.S. 5,273,322) does not disclose “holes adjacent the free ends” in regard to newly presented claim 30, the argument is not persuasive. The term “adjacent” carries not connotation of distance. The term “adjacent” merely indicates that the respective parts cannot be adjoining.

Conclusion

Applicant's amendment (the use of the term "transverse" in claims 11, 19, 25, and 30 as noted in the above 35 U.S.C. 112, second paragraph rejections; "said web portion is in surface-to-surface contact with a planar surface of said radially projecting flange" in claim 12, lines 4-5) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay R. Ripley whose telephone number is 571-272-7535. The examiner can normally be reached on 01:00 P.M. - 8:00 P.M. .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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J. R. Ripley



DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

ATTACHMENT A

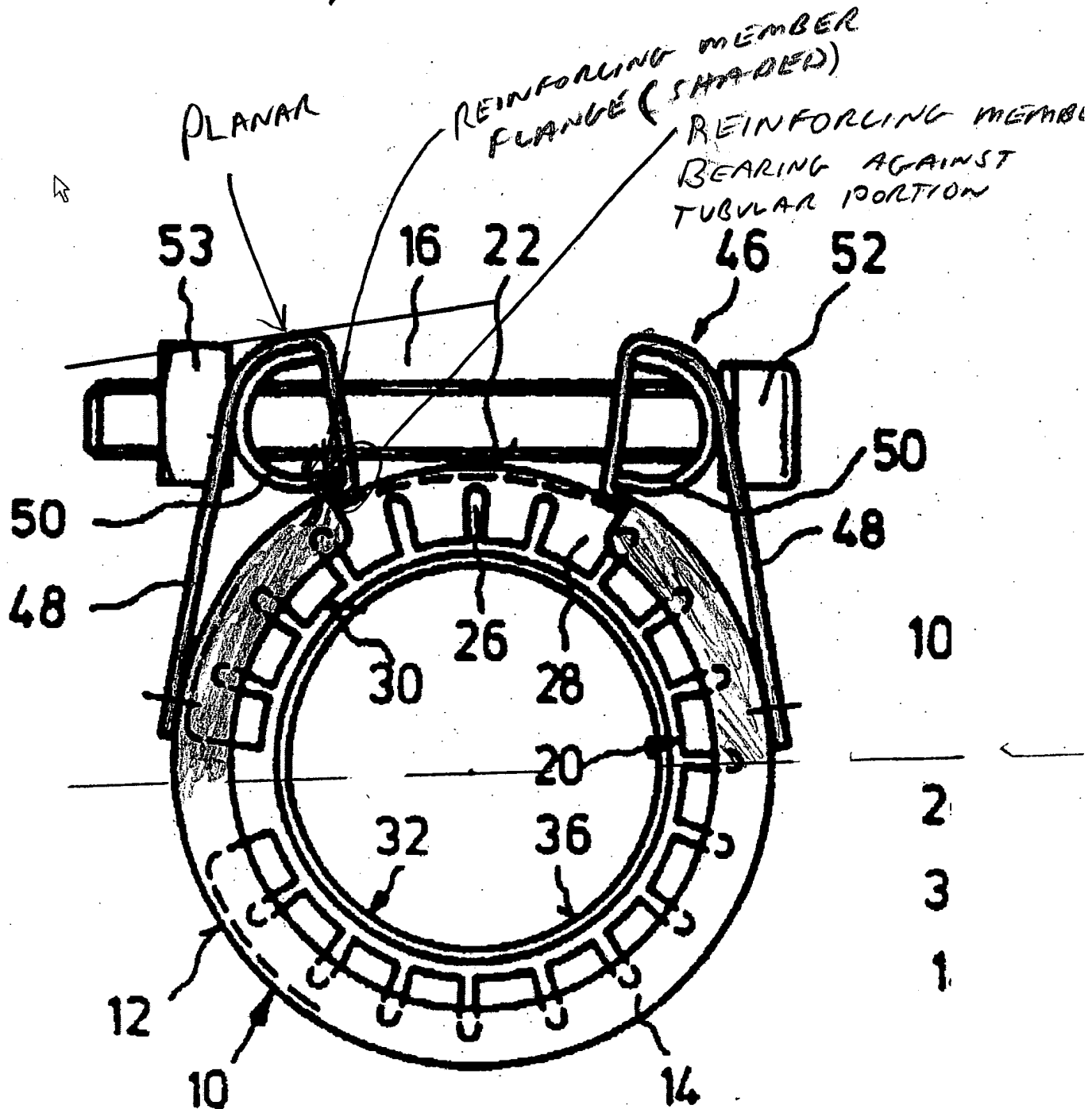


Fig. 1

SHADED AREAS ARE "FREE ENDS"